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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/082,466	02/25/2002	Tetsuya Okumura	57090 (70904)	4306

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EXAMINER

PSITOS, ARISTOTELIS M

ART UNIT	PAPER NUMBER
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2627

MAIL DATE	DELIVERY MODE
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09/12/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/082,466

Applicant(s)

OKUMURA ET AL.

Examiner

Aristotelis M. Psitos

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) - | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicants' response of 6/26/07 has been considered with the following results.

Specification

The amended title of the invention is descriptive. Applicants' cooperation is greatly appreciated.

Drawings

The new drawing has been entered.

Claim Objections

Claims 13-18 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The parent claim of these dependent claims limits itself to the measuring of the short (2T pulse). However, these claims further required a long pulse, and hence no longer limit the parent claim. This is considered an improper broadening of the scope of the parent claim. Appropriate correction is required.

Response to Arguments

Applicant's arguments filed 6/26/07 have been fully considered but they are not persuasive. The dependent claims attempt to broaden the scope of the independent claims by introducing a limitation predicated upon the "long" reproducing control marks. These long reproducing control marks are NOT included in the independent claim. Stated another way, since the wherein clause limits the functioning of the measurement means to measure the characteristic corresponding ONLY to the plurality of short reproducing power control marks, no long mark is measured.

Again, both independent claims merely recite (in the ultimate wherein clause thereof) ONLY (emphasis examiner) the short control marks. This is in keeping with the disclosed invention as stated in paragraphs 36 of the USPGPUB equivalent document 2002/0145956.

Applicants' argument that measuring of the long control marks is not precluded by the claim that is indeed the problem. Since as define by the claim, ONLY the short control marks are measured, and NO measuring of long marks is entailed, such is indeed lacking.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

In the below analysis the limitations of the following claims are identical:

- a) claims 3 and 4; identification of the short control mark as the 2T mark, pattern of mT, 2T, 2T, nT
- b) claims 5 and 6: identification of $m=n=2$
- c) claims 7-12: controlling means based on the measured reproduced signal characteristic
- d) claims 13-18: ratio of long and short control marks.
- e) claims 18-20, ratio of average

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4. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over the acknowledged prior art further considered with either Tanaka et al/ or Fuji and all further considered with Okumura et al ('576).

Applicants' depiction of the acknowledged prior art hardware (figure 5) is greatly appreciated. Further positive identification of such, if readily available is respectfully requested to complete the search report. In any event, this prior art depicts a laser power control system, which relies upon a ration of long and short pulse comparisons in order to maintain the laser power. This acknowledged prior art hence discloses the limitations of the claims, with the exception of requiring/limiting the measuring of the short reproducing control mark, identified as 2T, and a pattern of 5 of these pulses.

The ability of measuring the reproduced control mark to that of the 2T mark is taught by the Tanaka et al system – see the discussion with respect to figure 10, starting at col. 9 lines 15 plus.

Alternatively, Fuji discloses this ability.

It would have been obvious to modify the base system of the acknowledged prior art and modify it with the above noted teaching from either Tanaka et al/ or Fuji, motivation is to compensate for the thermal-shift pattern. Motivation is to so compensate.

With respect to the newly introduced limitation of having the short and long power control marks throughout a data recording area of a sector, such is taught by the third embodiment of the Okumura et al reference, see the description of figures 9 and 10 – i.e., acknowledged prior art.

It would have been obvious to modify the base systems as stated above with this additional teaching, motivation is as discussed in Okumura et al.

With respect to the limitations of the above group a & b claims, the acknowledged prior art figure depicts a pattern of 2T pulses, at least 5 and hence meets these claims.

With respect to the limitations of the above group c & d, and e claims, these are found in the acknowledged prior art – description of the power control accordingly as well as the ratio between a long and short pulse. See the above noted acknowledged prior art figures in this application, or alternatively figures 9 and 10 in the newly sited Okumura et al.

Hence no further modification of the acknowledged prior art is necessary.

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are not persuasive, and are moot in view of the new grounds of rejection.

The acknowledged prior art is relied upon for the reasons stated above.

The reference to Tanaka is pertinent in this environment – see the entire disclosure, which refers to the impact by various pulses (pulse lengths) and power levels (jitter effects), and the noted effect upon short pulse lengths such as 2T. Hence the examiner concludes such is indeed pertinent to the problem at hand – i.e., power level control.

The above rejection relying upon Tanaka is maintained. The examiner is not convinced by applicants' arguments. Pattern detection is known and those of ordinary skill in the art would avail themselves of such known capabilities/circuitry.

Alternatively, the newly recited reference to Fuji teaches such pattern detection capability – see figures 1 and 8 and their respective disclosure.

With respect to the ability with respect to the power control marks recorded in the data recording area, such is acknowledged as being prior art in the above newly cited Okamura et al reference.

Further identification of such is respectfully requested.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristotelis M. Psitos whose telephone number is (571) 272-7594. The examiner can normally be reached on M-F: 6:00 - 2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne D. Bost can be reached on (571) 272-7023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Aristotelis M Psitos
Primary Examiner
Art Unit 2627



AMP

okay to enter



FIG. 2

